ents recorded during 2004. Approximate altitudes are indicated on the right
s. Vertical lines indicate the average VMR from each time period.

ltaneous ACE (Atmospheric Chemistry Experiment) u
ic CO, C_2H_6, HCN, CH_3Cl, CH_4, C_2H_2, CH_3OH, HCOOH, a
urements show plumes up to 185 ppbv (10^{-9} per unit vo
6 ppbv for C_2H_6, 755 pptv (10^{-12} per volume) for CH_4, 0.1
H_2, 3.89 ppbv for CH_3OH, 0.843 ppbv for HCOOH, and
CS in western Canada and Alaska at 50°N-68°N latitude
June and 23 July 2004. Enhancement ratios and emis
HCOOH, CH_3OH, HCN, C_2H_6, and OCS relative to CO at
e inferred from measurements of young plumes compa
mixing ratios assumed to represent background condi
CO emission factor derived from boreal measurement
generally consistent with the limited data reported fo
getative types and emission phases measured in extra
ests including boreal forests. The low correlation betw
t emission mixing ratios and the SF_6 mixing ratio is
with no significant SF_6 emissions from the biomass fi